

# How to use Acuseek NVR

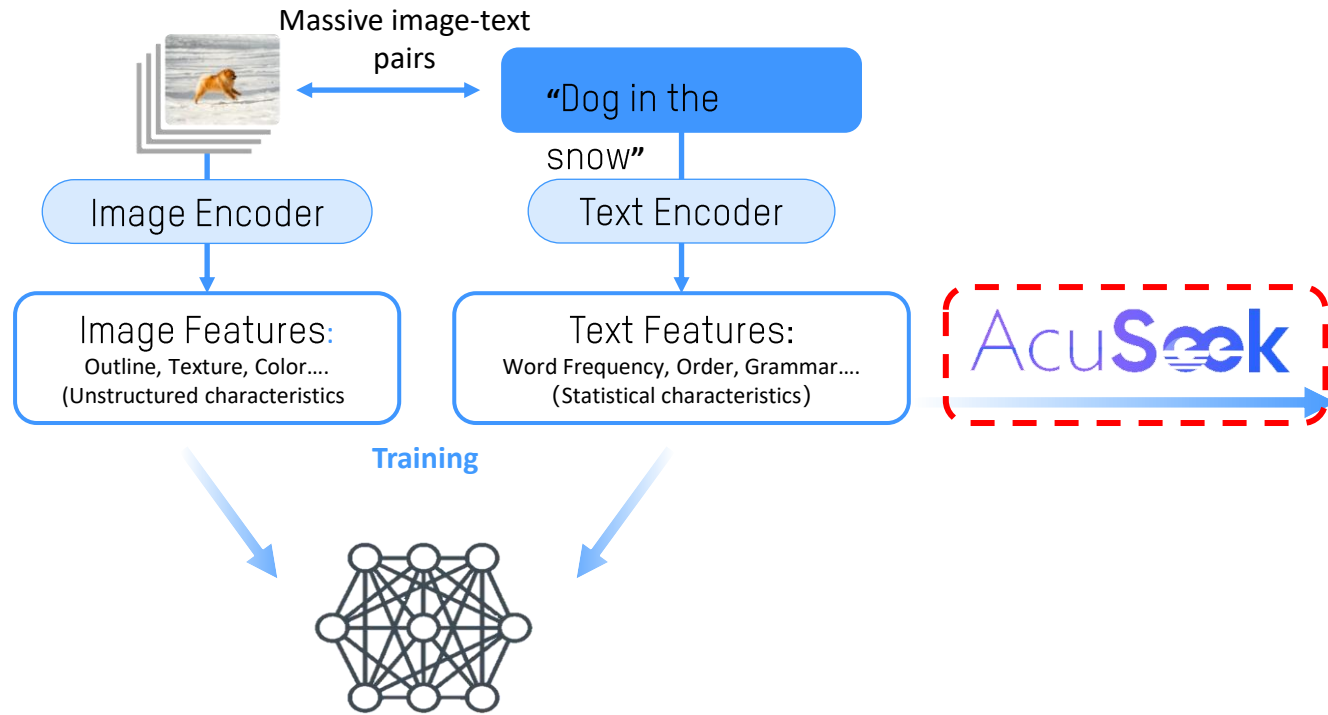


1. Product Introduction
2. Functional Configuration(GUI Web IVMS 4200)
3. FAQ&Troubleshooting

# Product Introduction

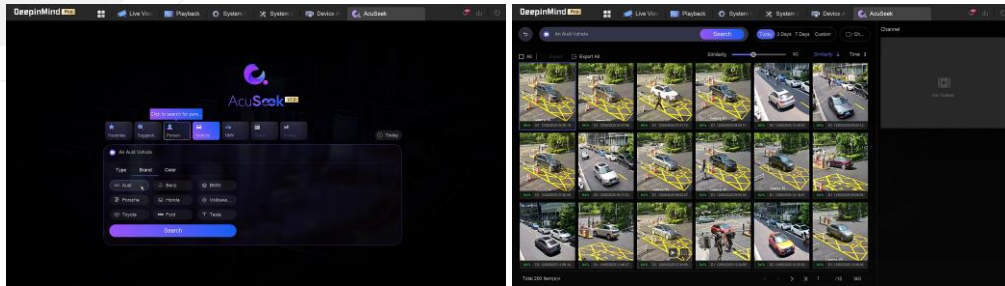
# The Acuseek Principle-----Large Multimodal Models

With a large multimodal model, images and their corresponding natural language descriptions are mapped to a shared high-dimensional vector space. This enables versatile functionalities, such as open-ended image searches using text, image searches using other images, and alarm triggering based on the presence of persons, vehicles, objects, events, and locations.



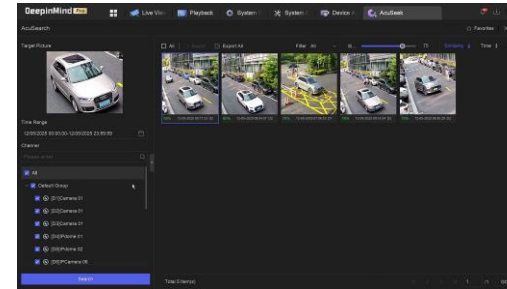
AcuSeek: A man in a black top, white pants, and glasses is walking his dog.

# Acuseek NVR



“Description by text”

Located Target



AcuSearch

Click search target to view

Quickly find the target activity path

① AsuSeek quickly locate the target

② AcuSearch identification accurately

Lost Items - Owner Search



handbag

Clothe

Security - Stranger Search



Stranger

Clothe

Safety - Motor Vehicle Search



Type

Brand

.....

Mangement - Behavior Search



without helmet

crunning

.....

# Acuseek NVR

I/VPro Series

Released

|           |                        |
|-----------|------------------------|
| 303623218 | DS-7608NXI-I2/VPro     |
| 303623220 | DS-7608NXI-I2/8P/VPro  |
| 303623222 | DS-7616NXI-I2/VPro     |
| 303623224 | DS-7616NXI-I2/16P/VPro |
| 303623226 | DS-7632NXI-I2/VPro     |
| 303623228 | DS-7632NXI-I2/16P/VPro |
| 303623245 | DS-7716NXI-I4/VPro     |
| 303623243 | DS-7716NXI-I4/16P/VPro |
| 303623247 | DS-7732NXI-I4/16P/VPro |
| 303623249 | DS-7732NXI-I4/VPro     |



|                  |   |
|------------------|---|
| <b>AcuSeek</b>   | <ul style="list-style-type: none"> <li>✓ Power by <b>Guanlan Large-Scale AI Model</b></li> <li>✓ Full Channel <b>AcuSeek with Acusense</b></li> <li>✓ Search for <b>Person, Vehicle, Non-motor vehicle</b></li> </ul> |
| <b>AcuSearch</b> | <ul style="list-style-type: none"> <li>✓ Full Channel <b>AcuSearch with Acusense</b></li> </ul>   |

|                 |  |
|-----------------|--|
| AcuSearch       |  |
| Performance     | If the cameras support Hikvision AcuSense Technology and have enabled AcuSearch function, the NVR supports AcuSearch in all channels, capable of modeling <b>300,000 targets/day</b> . |
| AcuSeek         |  |
| Performance     | If the cameras support Hikvision AcuSense Technology and have enabled AcuSearch function, the NVR supports AcuSeek in all channels, capable of modeling <b>300,000 targets/day</b> .   |
| Search Language | <b>English</b>   |



# Acuseek Camera----- IPC compatible list

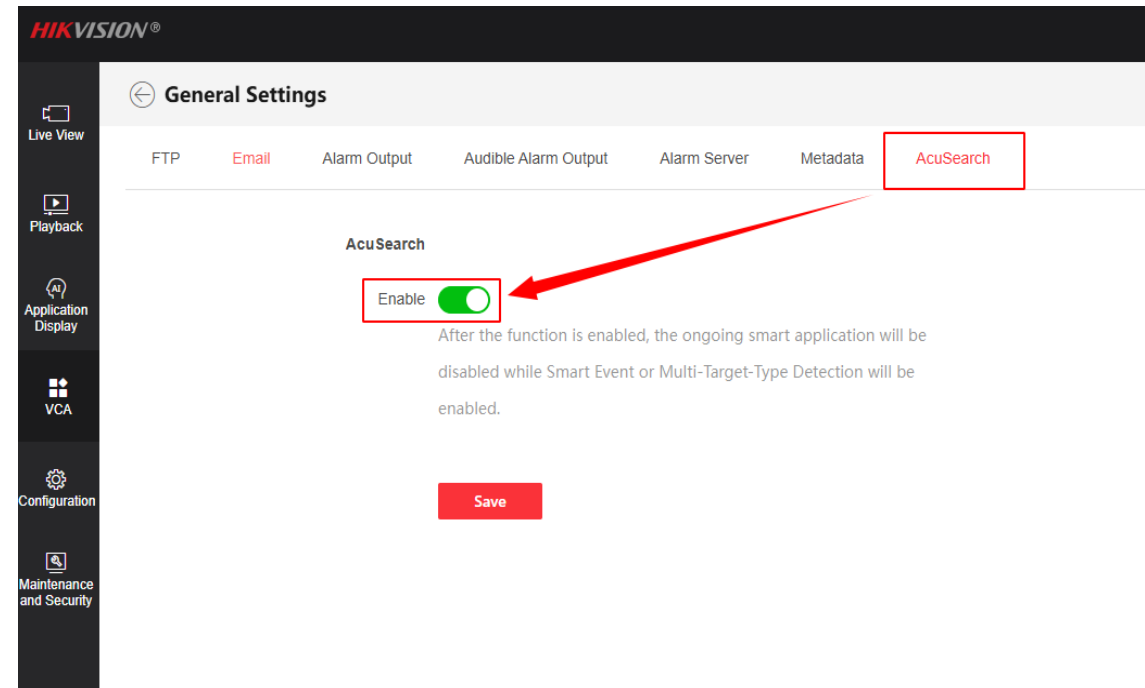
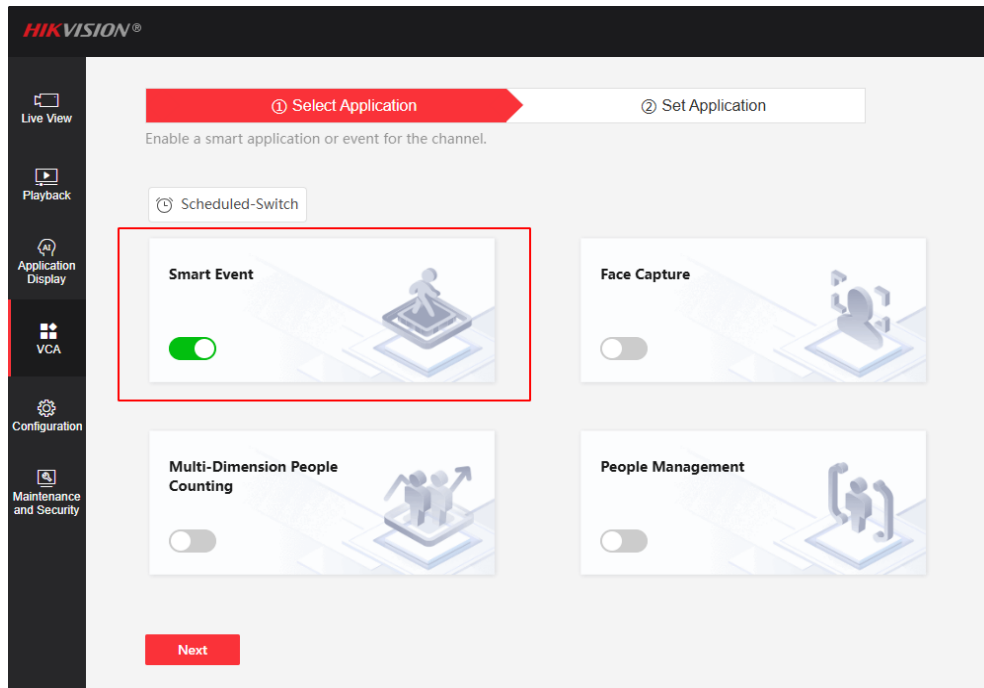
| Series   | Models                      | Firmware Version | Releasing Time |
|--|-----------------------------|------------------|----------------|
| 2 series<br>(Smart Event)  | 2xx3G2 (G5 Platform)        | V5.7.17SP        | released       |
|  | 2xx6G2 (G5 Platform)        | V5.7.17SP        | released       |
|  | 2xx7G2 (G5 Platform)        | V5.7.17SP        | released       |
|  | 2xx7G2H (G5 Platform)       | V5.7.17SP        | released       |
|  | 2xx7G3(H13 Platform)        | V5.8.2           | released       |
|  | 2x83G2(T) (H8)              | V5.7.4_240319    | released       |
| 3 series<br>(Smart Event)  | 3xx3G2                      | V5.7.17SP        | released       |
|  | 3xx6G2 H version            | V5.7.52          | released       |
|  | 3xx6G2H                     | V5.7.52          | released       |
|  | 3xx7G2                      | V5.7.17SP        | released       |
|  | 3xx6G3 (H13)                | v5.8.10          | released       |
|  | 3xx7G3 (H13 )               | v5.8.10          | released       |
| DeepinView series<br>(SmartEvent/Multi-Target-Type<br>Detection) | 7xx6G0                      | V5.8.60          | released       |
|  | 7xx7G0                      | V5.8.60          | released       |
|  | 7xx6G2                      | V5.9.10          | released       |
|  | 7xx7G2                      | V5.9.10          | released       |
| PTZ series<br>(SmartEvent/Multi-Target-Type<br>Detection)        | DS-2DE4/5/7xxx(H8 Platform) | V5.8.0           | released       |
|  | DS-SE4 DSSE7 G5H8 G7H8      | /                | April.2025     |
|  | DS-DP8A (H5H11)             | V5.9.50          | released       |
|  | DS-DP7D (H11H11H11)         | V5.9.70          | released       |
|  | DS-SF XXXX(G7H11)           | V5.9.4           | released       |
|  | DS-DFXXX (H11 )             | V5.9.2 V5.9.5    | released       |

# Functional Configuration (GUI Web IVMS 4200)

# Acuseek NVR+Acuseek Camera---GUI

1. Log in to the web of camera and switch to the corresponding mode:

- (1) Log in to the web of the device and click "VCA" – "Select Application" – "Smart(Multi-Target-Type Detection)" as shown in the following figure. then click "Save".
- (2) After the camera restarts. click "VCA" – "Set Application" – "General Settings" – "Acusearch" as shown in the following figure. Click "Enable" and "Save".



# Acuseek NVR+Acuseek Camera---GUI

## 2. Engine configuration

(1) Click "Event Center" - "Event Configuration" - "Smart Settings" - "Algorithm Management" - "Smart Search" as shown in the following figure.

Engine 1 switches to Acusearch algorithm. then AI by camera and click "OK"

Engine 2 switches to Acuseek algorithm. then AI by camera and click "OK"

The screenshot shows the NVR 5.0 VPro GUI with the 'Smart Search' configuration window open. The left sidebar shows the navigation path: Event Center > Event Configuration > Smart Settings > Algorithm Management > Smart Search. The main window is divided into two panes for 'Engine 1' and 'Engine 2'.  
 - Engine 1: Algorithm is set to 'AcuSearch'. The 'Analysis Engine' dropdown is set to 'AcuSearch'. The 'Linked Channel' table has 'AI by Camera' checked for all channels.  
 - Engine 2: Algorithm is set to 'AcuSeek'. The 'Analysis Engine' dropdown is set to 'AcuSeek'. The 'Linked Channel' table has 'Enable' checked for all channels.  
 Both panes have an 'OK' button at the bottom.

A warning dialog box with a question mark icon. The text reads: "If AcuSearch algorithm is unbound, AcuSeek algorithm will be unbound simultaneously. Continue?". There are 'OK' and 'Cancel' buttons at the bottom.

**Note:**

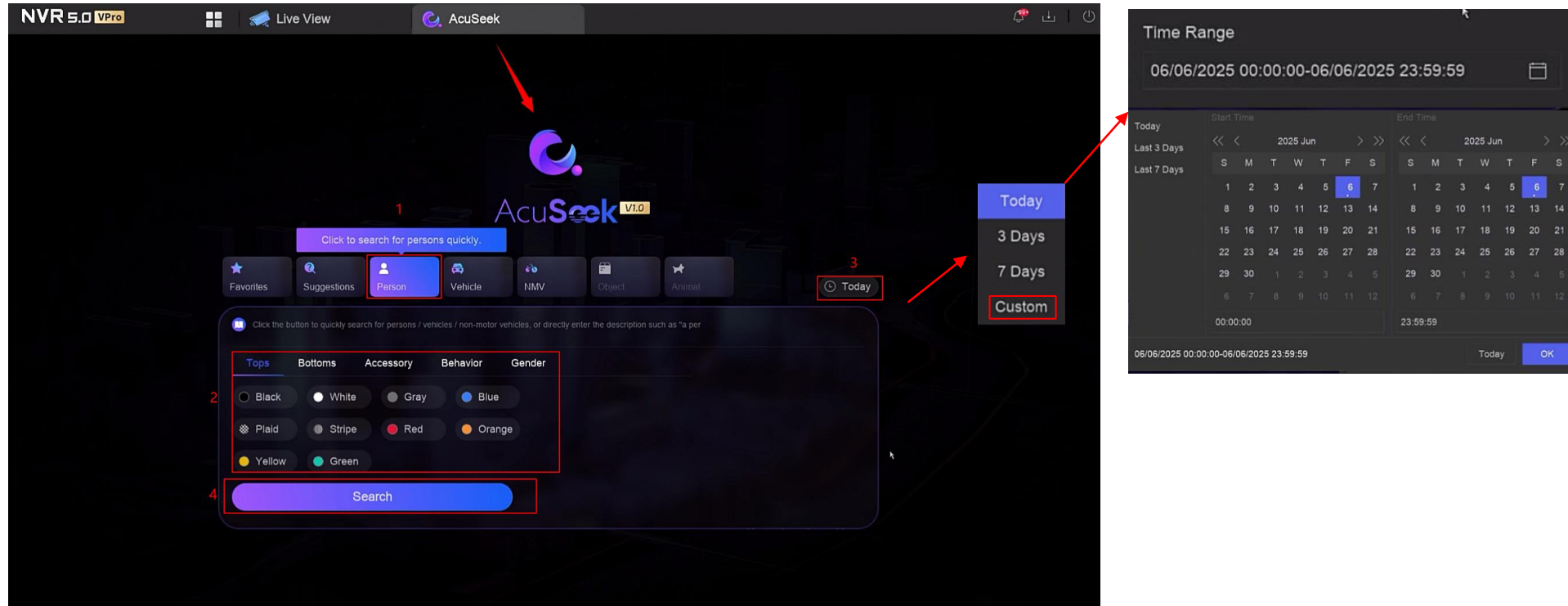
The AcuSeek algorithm should be run simultaneously with the AcuSearch algorithm. The AcuSeek function will be unavailable if the AcuSearch algorithm is switched to another algorithm.

Engine 1 can run Acusearch or Facial Recognition. Engine 2 can only run Acuseek algorithm. Perimeter and motion2.0 are not supported for the current

# Acuseek NVR+Acuseek Camera---GUI

4. Use Acuseek on the GUI----Take Person as an example

- (1) One way, Click "Acuseek"、"Person"、"Attribute(Tops)"、"Date(Today)"、"Search" in sequence as shown in the following figure.
- (2) Another way, input with the format of [Adjective + Target] (currently supported target types: person, vehicle, non-motor vehicle) to obtain more accurate search results. For example, "a child with a hat", "a black SUV", "a bicycle".



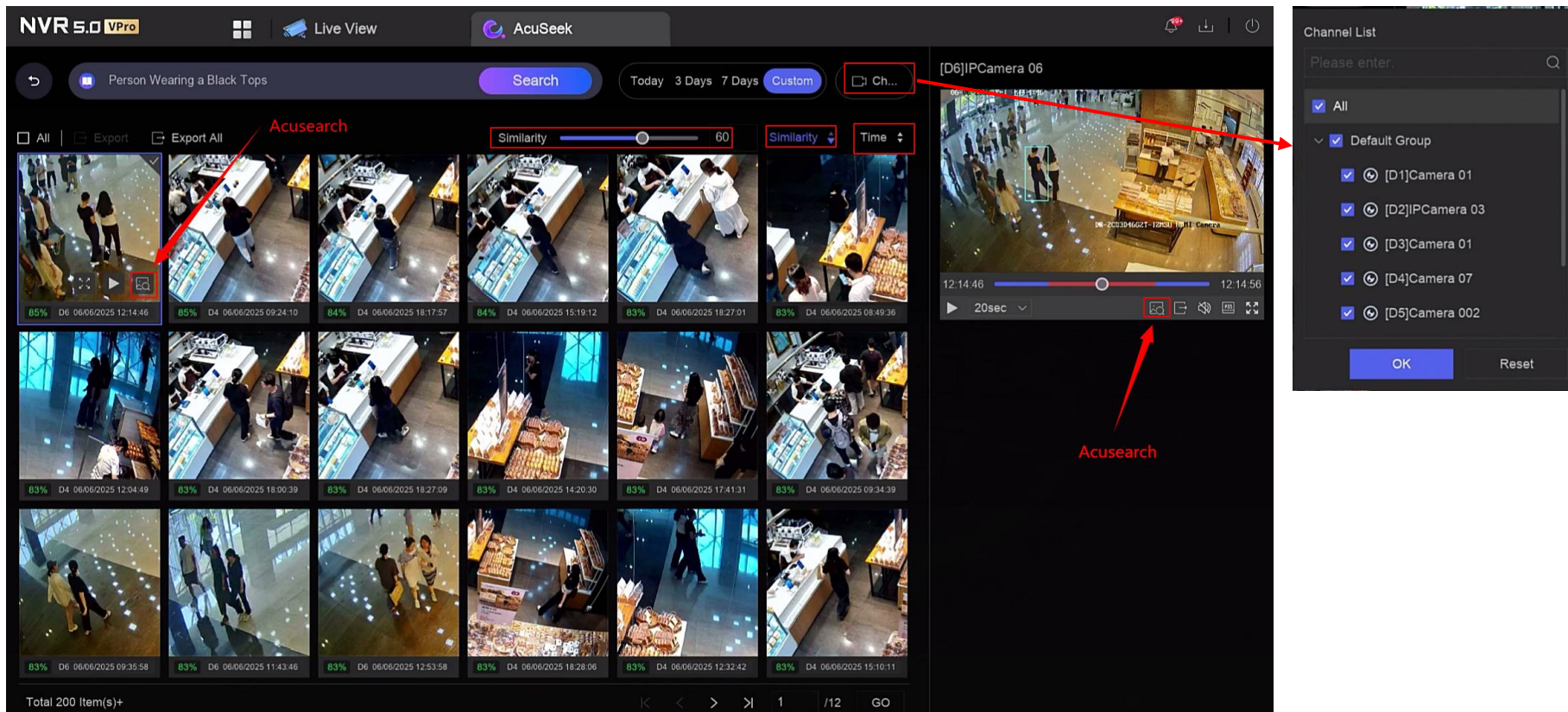
**Note:**

Acuseek supports simultaneous retrieval with 5 keywords. You can enter up to 5 keywords for a search, and the system will return results based on the combination of these keywords.

# Acuseek NVR+Acuseek Camera---GUI

4. Use Acuseek on the GUI---Take Person as an example

(1) On the result display interface of Acuseek, the search results can be adjusted through parameters such as "Similarity", "Time", "Date", and "Channel".




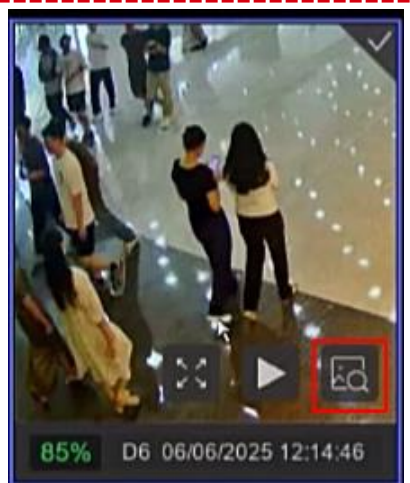
Note:

It supports displaying up to 200 search results at most

# Acuseek NVR+Acuseek Camera---GUI

4. Use Acuseek on the GUI----Take Person as an example

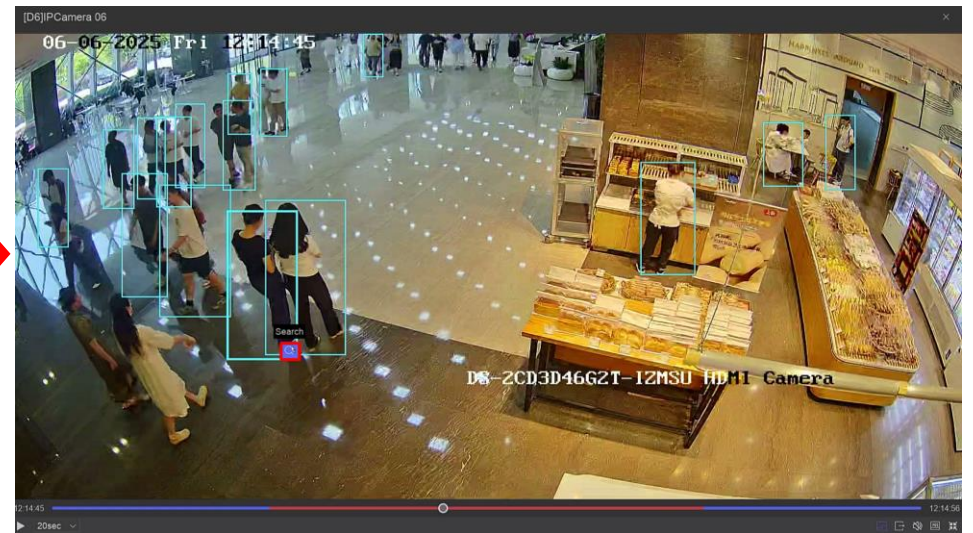
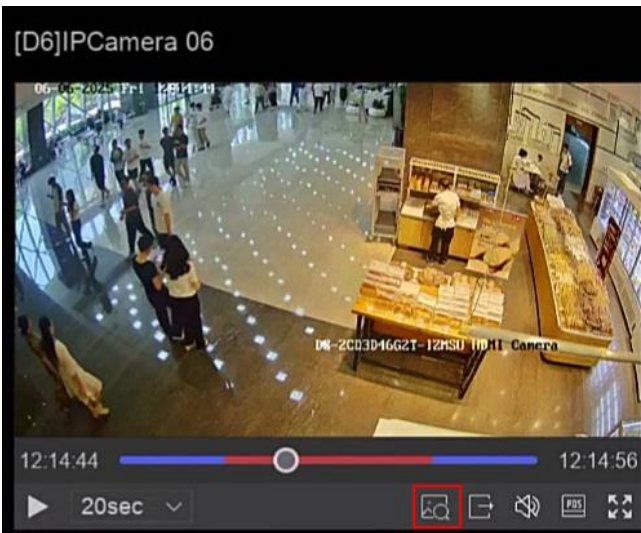
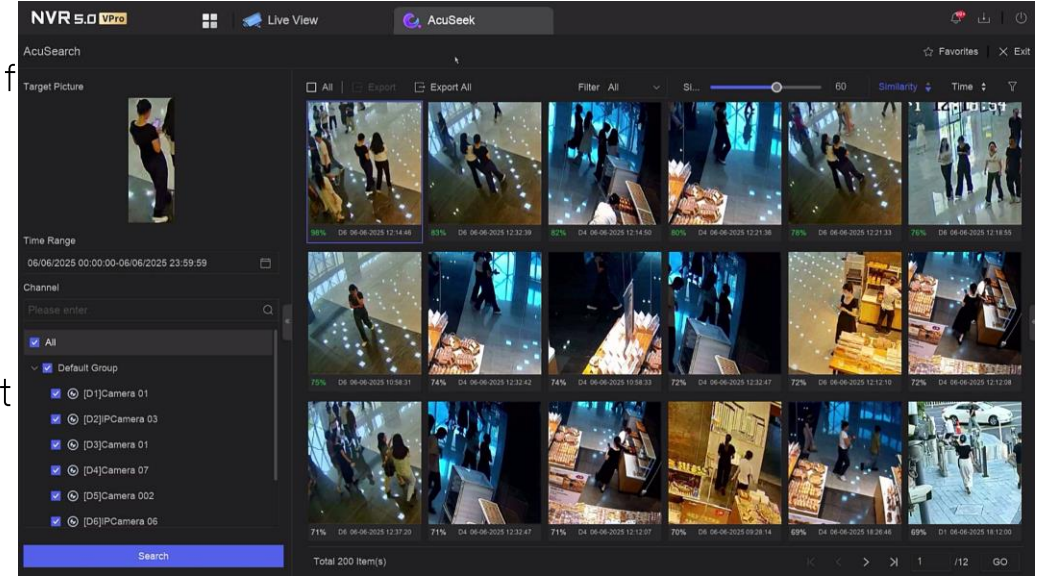
(1) After selecting the video, you can click  " " to use the Acuseek function



Method 1



Acuseek is based on the text input by Acuseek



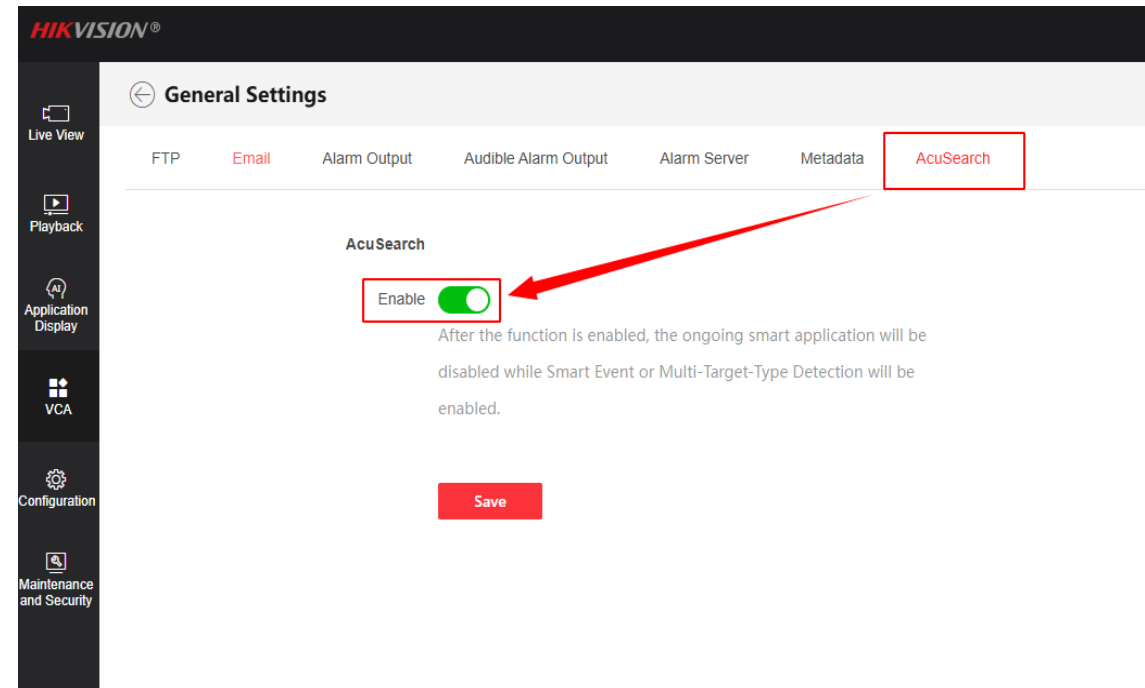
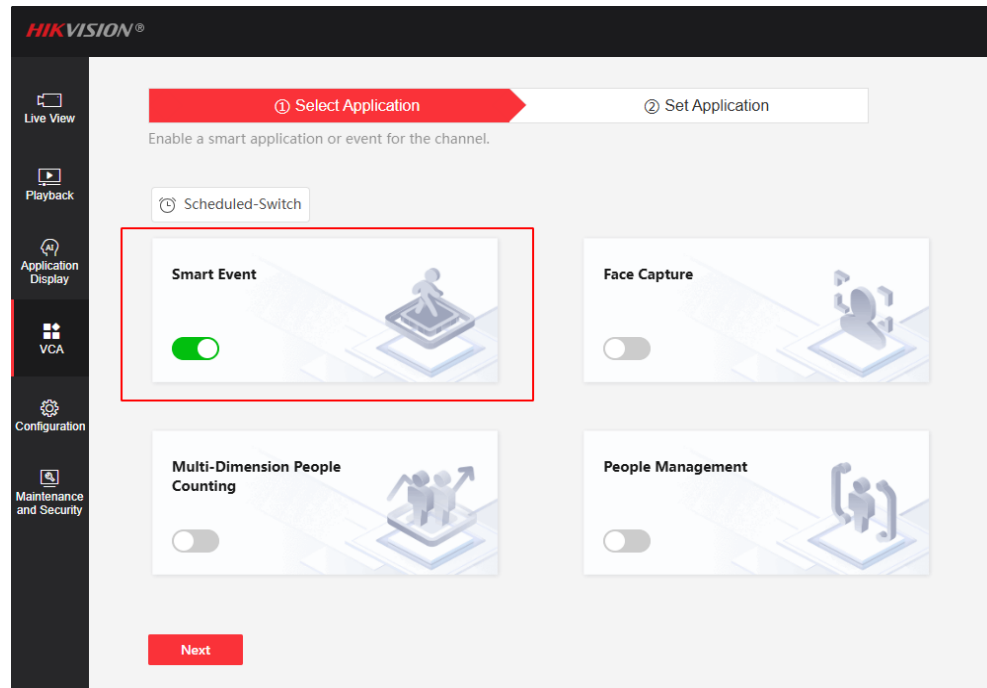
Method 2

Acuseek any target in the whole frame

# Acuseek NVR+Acuseek Camera--- Web

1. Log in to the web of camera and switch to the corresponding mode:

- (1) Log in to the web of the device and click "VCA" – "Select Application" – "Smart(Multi-Target-Type Detection)" as shown in the following figure. then click "Save".
- (2) After the camera restarts. click "VCA" – "Set Application" – "General Settings" – "Acusearch" as shown in the following figure. Click "Enable" and "Save".



# Acuseek NVR+Acuseek Camera--- Web

## 2. Engine configuration

(1) Click "Event Center" - "VCA Configuration" - "Engine Settings" - "Engine Settings" as shown in the following figure.

Engine 1 switches to Acuseek algorithm. Engine 2 switche to Acuseek algorithm

The screenshot displays the HIKVISION web interface for engine configuration. The left sidebar shows the navigation menu with 'Event Center' selected. The main content area is titled 'Engine Settings' and shows a table with two engines. Red arrows point from the table to the dropdown menus on the right.

| No. | Status  | Mode      | Max. Number of Alarms | Max. Number of Characters |
|-----|---------|-----------|-----------------------|---------------------------|
| 1   | Running | AcuSearch | 8                     | 6                         |
| 2   | Running | AcuSeek   | 8                     | 0                         |

The dropdown menu on the right shows the following options: AcuSearch (selected), Unloaded, Facial Recognition, and AcuSearch. The bottom panel shows the engine settings after switching Engine 1 to 'Unloaded' and Engine 2 to 'AcuSeek'. A warning dialog box is displayed with the following text:

**Warning:** The AcuSeek algorithm should be run simultaneously with the AcuSearch algorithm. The AcuSeek function will be unavailable if the AcuSearch algorithm is switched to another algorithm.

**Note:**

The AcuSeek algorithm should be run simultaneously with the AcuSearch algorithm. The AcuSeek function will be unavailable if the AcuSearch algorithm is switched to another algorithm.

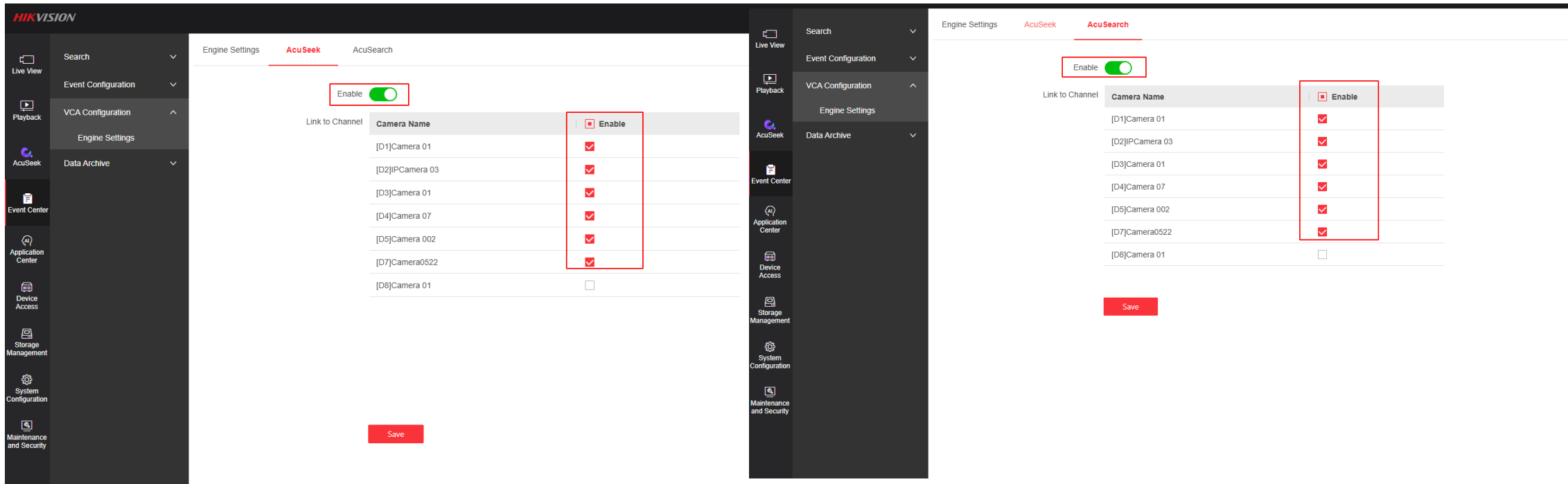
Engine 1 can run Acusearch or Facial Recognition. Engine 2 can only run Acuseek algorithm. Perimeter and motion2.0 are not supported for the current

# Acuseek NVR+Acuseek Camera---

## Web

### 3. Enable Acusearch and Acuseek

- (1) Click "Event Center" – "VCA Configuration" – "Engine Settings" – "Acusearch" as shown in the following figure. then enable cameras and click "Save".
- (2) Click "Event Center" – "VCA Configuration" – "Engine Settings" – "Acuseek" as shown in the following figure. then enable cameras and click



The image shows two screenshots of the HIKVISION web interface. The left screenshot shows the 'Acuseek' configuration page with the 'Enable' toggle switch turned on and a table of cameras with checkboxes in the 'Enable' column. The right screenshot shows the 'AcuSearch' configuration page with the 'Enable' toggle switch turned on and a table of cameras with checkboxes in the 'Enable' column.

**Acuseek Configuration Screenshot:**

Enable

| Link to Channel | Camera Name     | Enable                              |
|-----------------|-----------------|-------------------------------------|
|                 | [D1]Camera 01   | <input checked="" type="checkbox"/> |
|                 | [D2]IPCamera 03 | <input checked="" type="checkbox"/> |
|                 | [D3]Camera 01   | <input checked="" type="checkbox"/> |
|                 | [D4]Camera 07   | <input checked="" type="checkbox"/> |
|                 | [D5]Camera 002  | <input checked="" type="checkbox"/> |
|                 | [D7]Camera0522  | <input checked="" type="checkbox"/> |
|                 | [D8]Camera 01   | <input type="checkbox"/>            |

Save

**AcuSearch Configuration Screenshot:**

Enable

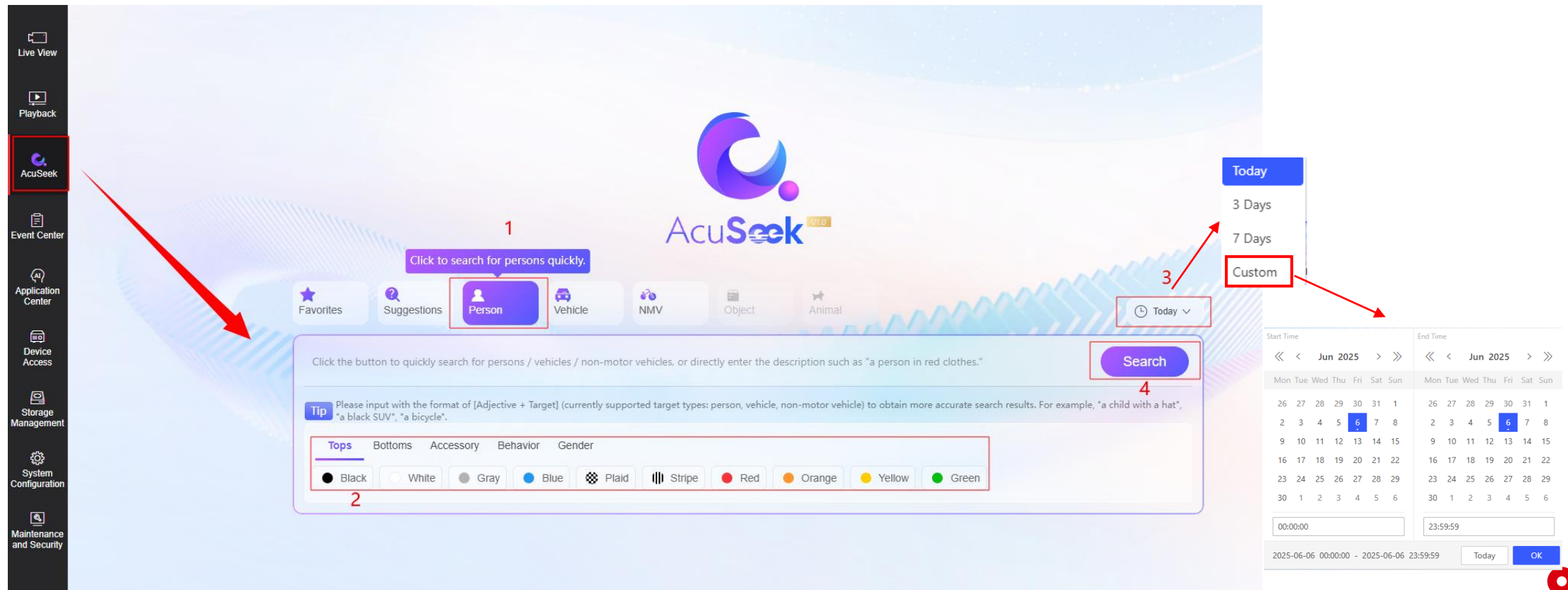
| Link to Channel | Camera Name     | Enable                              |
|-----------------|-----------------|-------------------------------------|
|                 | [D1]Camera 01   | <input checked="" type="checkbox"/> |
|                 | [D2]IPCamera 03 | <input checked="" type="checkbox"/> |
|                 | [D3]Camera 01   | <input checked="" type="checkbox"/> |
|                 | [D4]Camera 07   | <input checked="" type="checkbox"/> |
|                 | [D5]Camera 002  | <input checked="" type="checkbox"/> |
|                 | [D7]Camera0522  | <input checked="" type="checkbox"/> |
|                 | [D8]Camera 01   | <input type="checkbox"/>            |

Save

# Acuseek NVR+Acuseek Camera--- Web

4. Use Acuseek on the WEB----Take Person as an example

- (1) One way, Click "Acuseek"、"Person"、"Attribute(Tops)"、"Date(Today)"、"Search" in sequence as shown in the following figure.
- (2) Another way, input with the format of [Adjective + Target] (currently supported target types: person, vehicle, non-motor vehicle) to obtain more accurate search results. For example, "a child with a hat", "a black SUV", "a bicycle".



The screenshot displays the Acuseek web interface with several key elements highlighted by red boxes and numbered annotations:

- 1:** A red arrow points to the "AcuSeek" icon in the left sidebar.
- 2:** A red box highlights the "Person" button in the top navigation bar, with a tooltip that says "Click to search for persons quickly."
- 3:** A red box highlights the "Today" dropdown menu in the top right corner, which is open to show options: "Today", "3 Days", "7 Days", and "Custom".
- 4:** A red box highlights the "Search" button in the main search area.

The main search area includes a text input field with a tip: "Please input with the format of [Adjective + Target] (currently supported target types: person, vehicle, non-motor vehicle) to obtain more accurate search results. For example, 'a child with a hat', 'a black SUV', 'a bicycle'." Below the input field are tabs for "Tops", "Bottoms", "Accessory", "Behavior", and "Gender". Under the "Tops" tab, there are color and pattern selection buttons: Black, White, Gray, Blue, Plaid, Stripe, Red, Orange, Yellow, and Green.

At the bottom right, there is a date and time selection interface showing a calendar for June 2025, with the date "6" selected. Below the calendar are input fields for "Start Time" (00:00:00) and "End Time" (23:59:59), and a date range "2025-06-06 00:00:00 - 2025-06-06 23:59:59" with "Today" and "OK" buttons.

# Acuseek NVR+Acuseek Camera--- Web

4. Use Acuseek on the web----Take Person as an example

(1) On the result display interface of Acuseek, the search results can be adjusted through parameters such as "Similarity", "Time", "Date", and "Channel".

The screenshot displays the Acuseek web interface. At the top, there is a search bar with the text "Person Wearing a Black Tops" and a "Search" button. Below the search bar, there are filters for "Today", "3 Days", "7 Days", "Custom", and "Channel". The main area shows a grid of search results, each with a thumbnail image, a similarity percentage (e.g., 85%, 84%, 83%), a camera ID (e.g., D6, D4), and a timestamp. A red arrow points from the search bar to the first result. To the right, a detailed view of a video clip is shown, with a red box highlighting a person in the video. Below the video, there is a "Channel" list with checkboxes for various camera IDs: [D1] Camera 01, [D2] IPCamera 03, [D3] Camera 01, [D4] Camera 07, [D5] Camera 002, and [D7] Camera0522. A red arrow points from the "Channel" list to the video player. At the bottom of the interface, there is a pagination bar showing "Total: 200" and "18" results per page, along with a "Go" button.

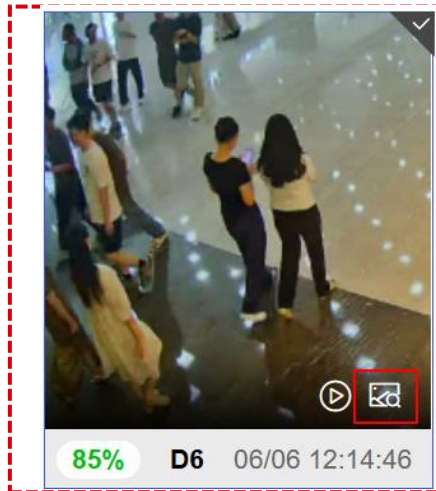
Note:

It supports displaying up to 200 search results at most

# Acuseek NVR+Acuseek Camera---web

4. Use Acuseek on the web----Take Person as an example

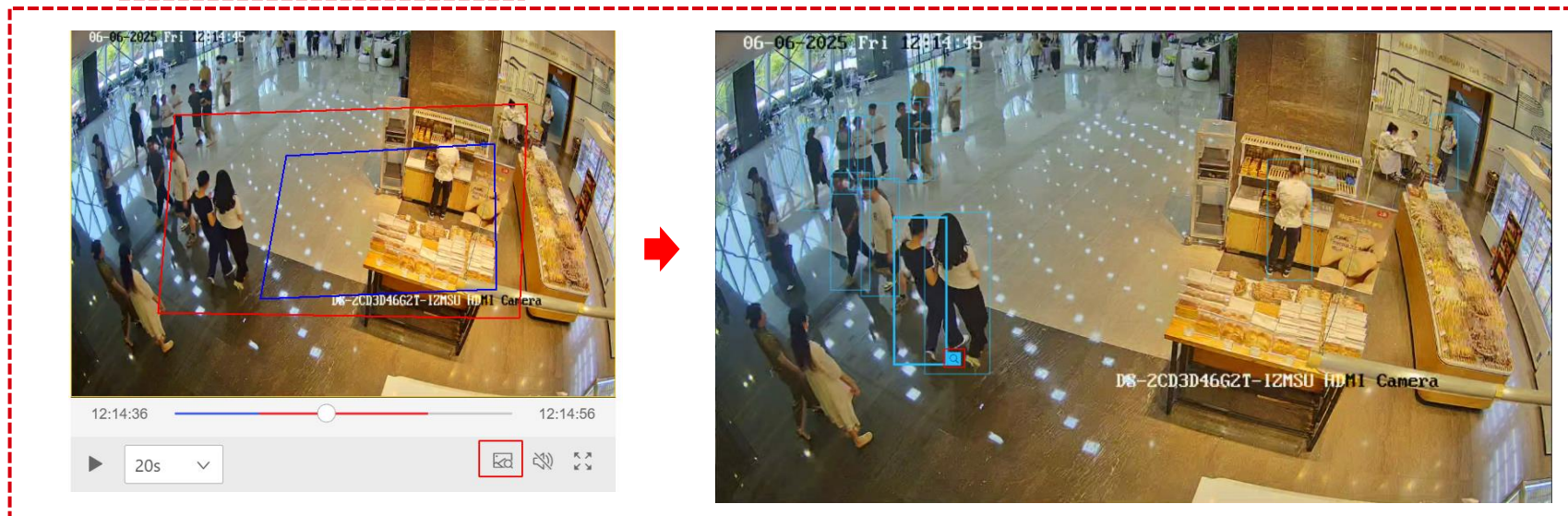
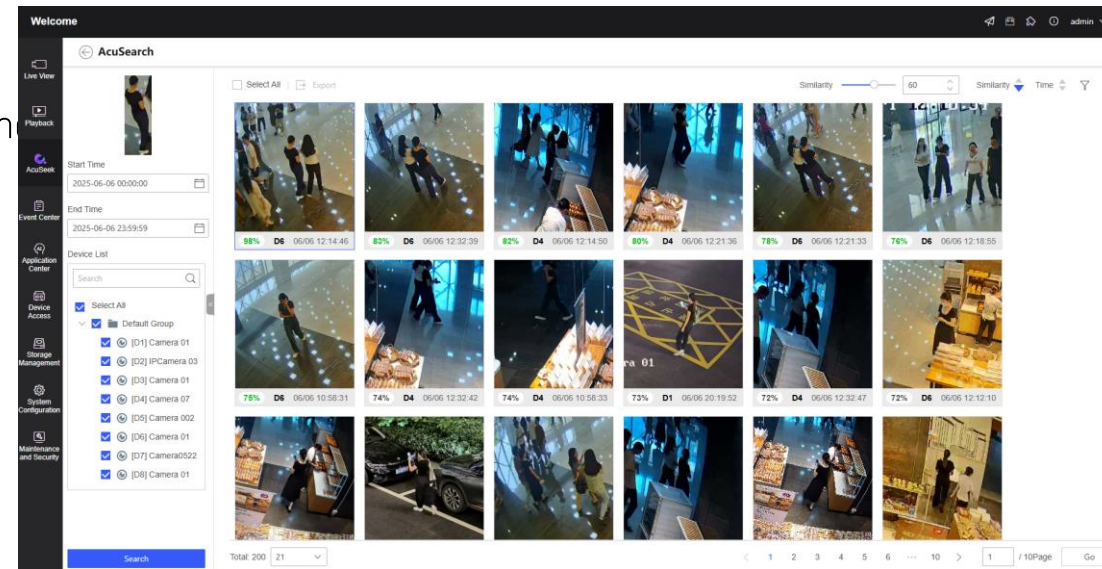
(1) After selecting the video, you can click  " " to use the Acuseek function



Method 1



Acuseek is based on the text input by Acuseek



Method 2

Acuseek any target in the whole frame

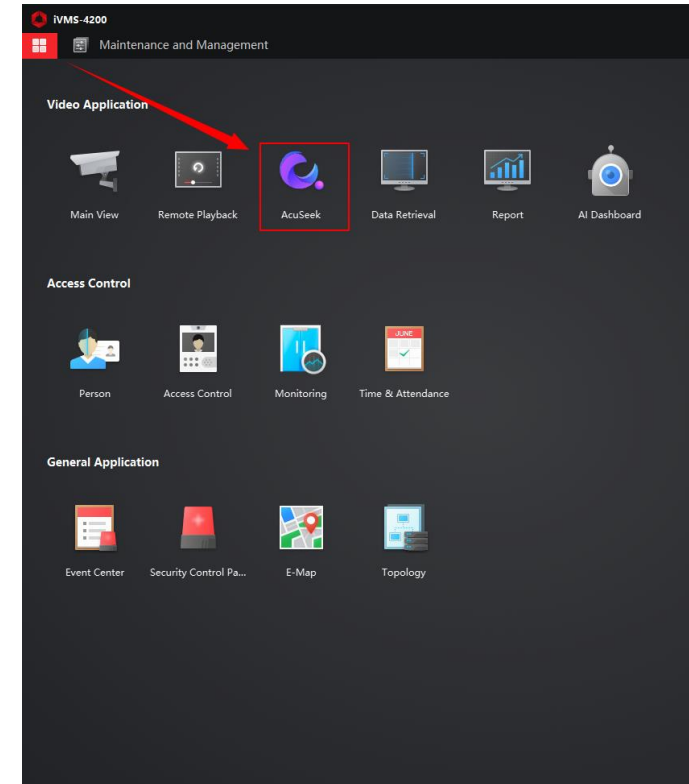
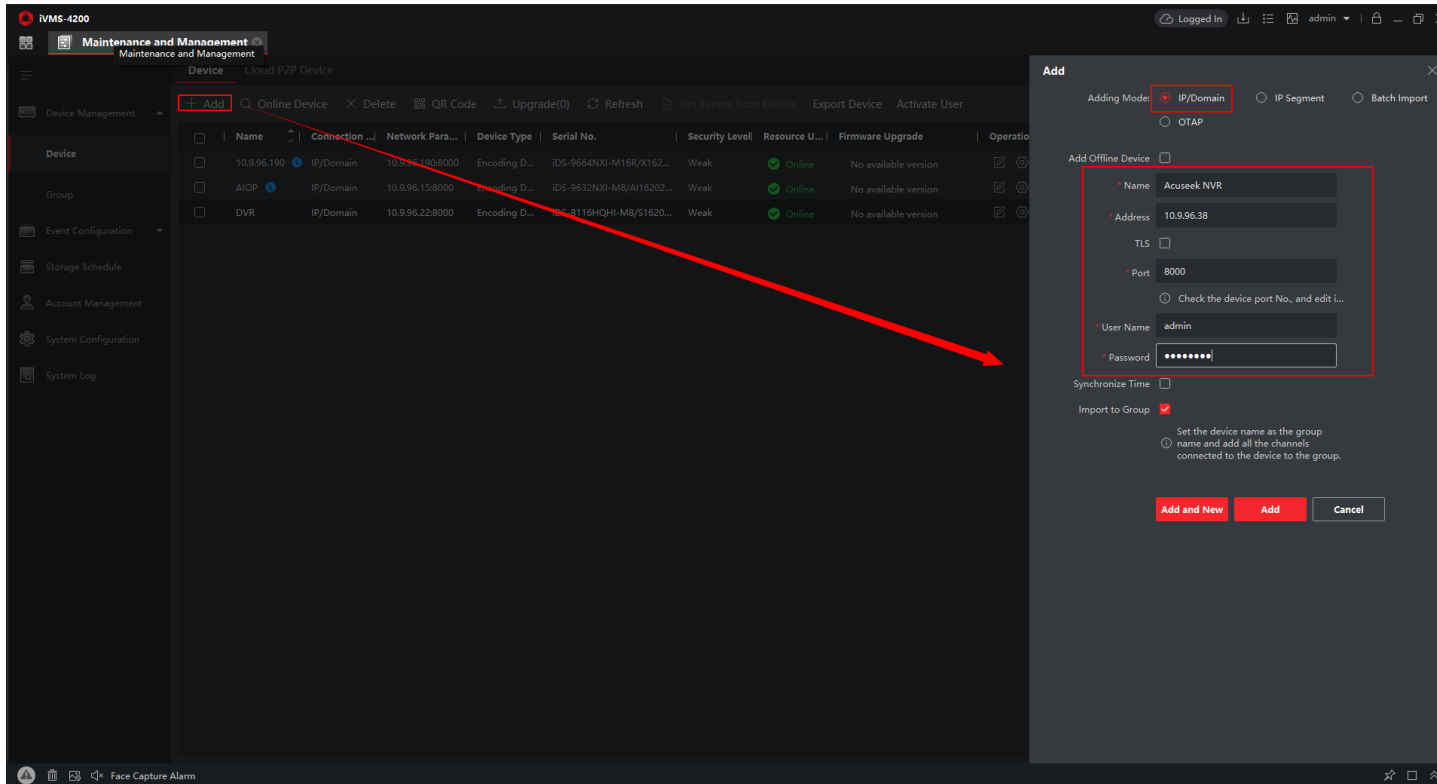
# Acuseek NVR+Acuseek Camera---IVMS 4200

1. Install IVMS 4200 and add Acuseek Nvr

(1) The IVMS 4200 version supporting Acuseek NVR is V3.13.0.5 build20250527

Link: [iVMS-4200 V3.13.0.5\\_E - Software - Hikvision Global](#)

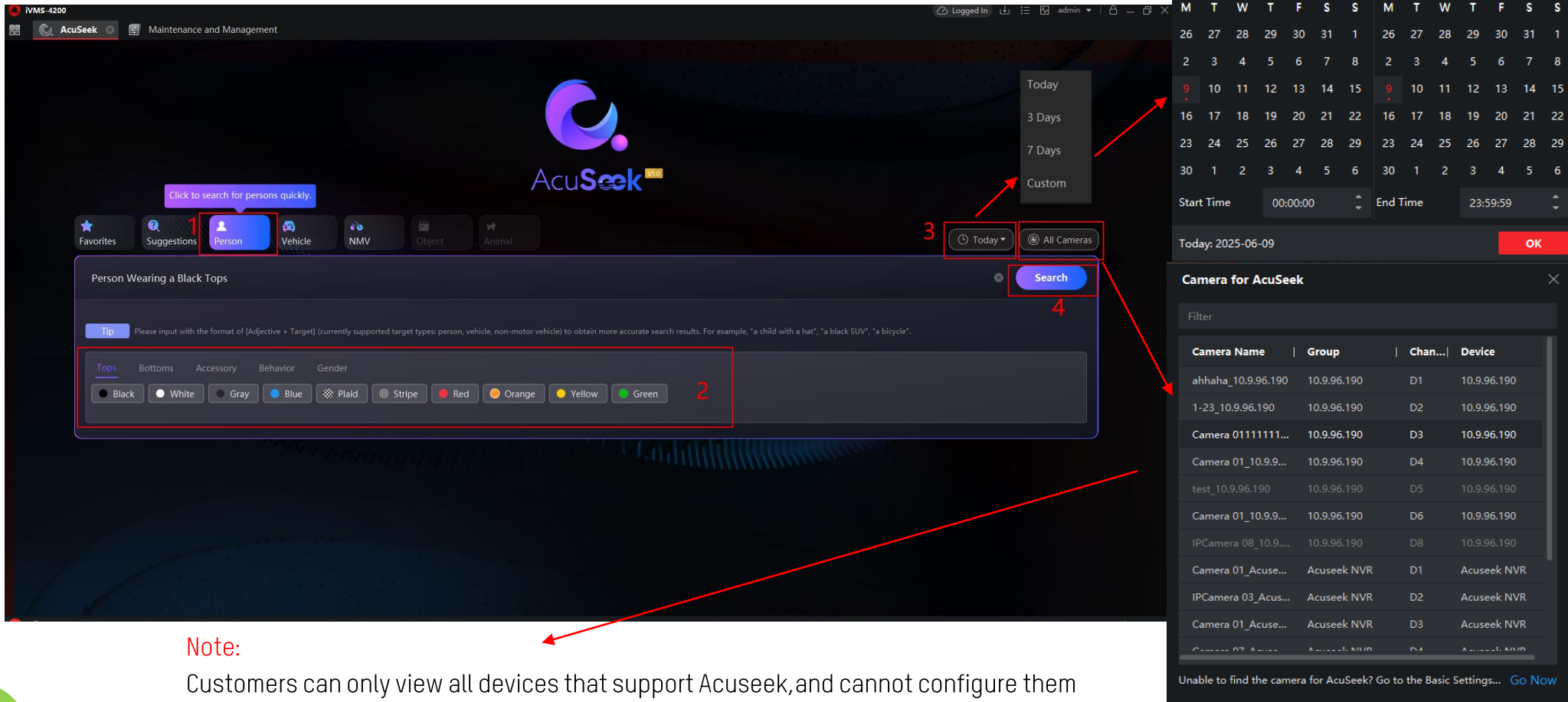
iVMS-4200(V3.13.0.5\_E)



# Acuseek NVR+Acuseek Camera---IVMS 4200

2. Use Acuseek on the 4200---Take Person as an example

- (1) One way, Click "Acuseek"、"Person"、"Attribute(Tops)"、"Date(Today)"、"Search" in sequence as shown in the following figure.
- (2) Another way, input with the format of [Adjective + Target] (currently supported target types: person, vehicle, non-motor vehicle) to obtain more accurate search results. For example, "a child with a hat", "a black SUV", "a bicycle"



The screenshot shows the IVMS 4200 Acuseek interface. The main window displays 'Person Wearing a Black Tops' with a search bar and filter options. A tip suggests using the format [Adjective + Target] for better results. The interface includes a navigation bar with 'Person' selected, a date selector set to 'Today', and a 'Search' button. A calendar overlay is visible on the right, and a 'Camera for Acuseek' list is shown at the bottom right.

| Camera Name          | Group       | Chan... | Device      |
|----------------------|-------------|---------|-------------|
| ahhaha_10.9.96.190   | 10.9.96.190 | D1      | 10.9.96.190 |
| 1-23_10.9.96.190     | 10.9.96.190 | D2      | 10.9.96.190 |
| Camera 01111111...   | 10.9.96.190 | D3      | 10.9.96.190 |
| Camera 01_10.9.9...  | 10.9.96.190 | D4      | 10.9.96.190 |
| test_10.9.96.190     | 10.9.96.190 | D5      | 10.9.96.190 |
| Camera 01_10.9.9...  | 10.9.96.190 | D6      | 10.9.96.190 |
| IPCamera 08_10.9...  | 10.9.96.190 | D8      | 10.9.96.190 |
| Camera 01_Acuse...   | Acuseek NVR | D1      | Acuseek NVR |
| IPCamera 03_Acuse... | Acuseek NVR | D2      | Acuseek NVR |
| Camera 01_Acuse...   | Acuseek NVR | D3      | Acuseek NVR |
| Camera 07_Acuse...   | Acuseek NVR | D4      | Acuseek NVR |

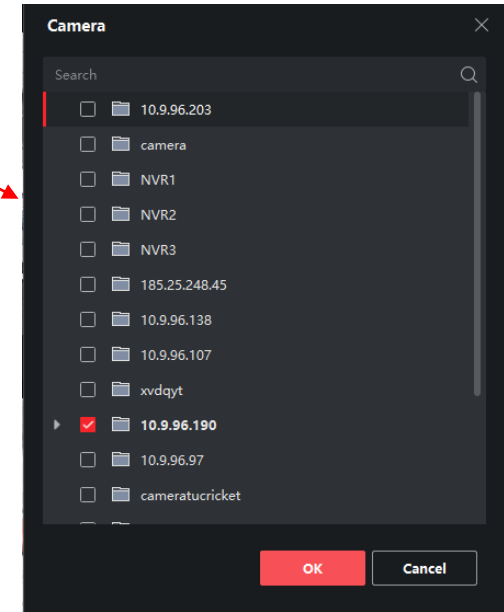
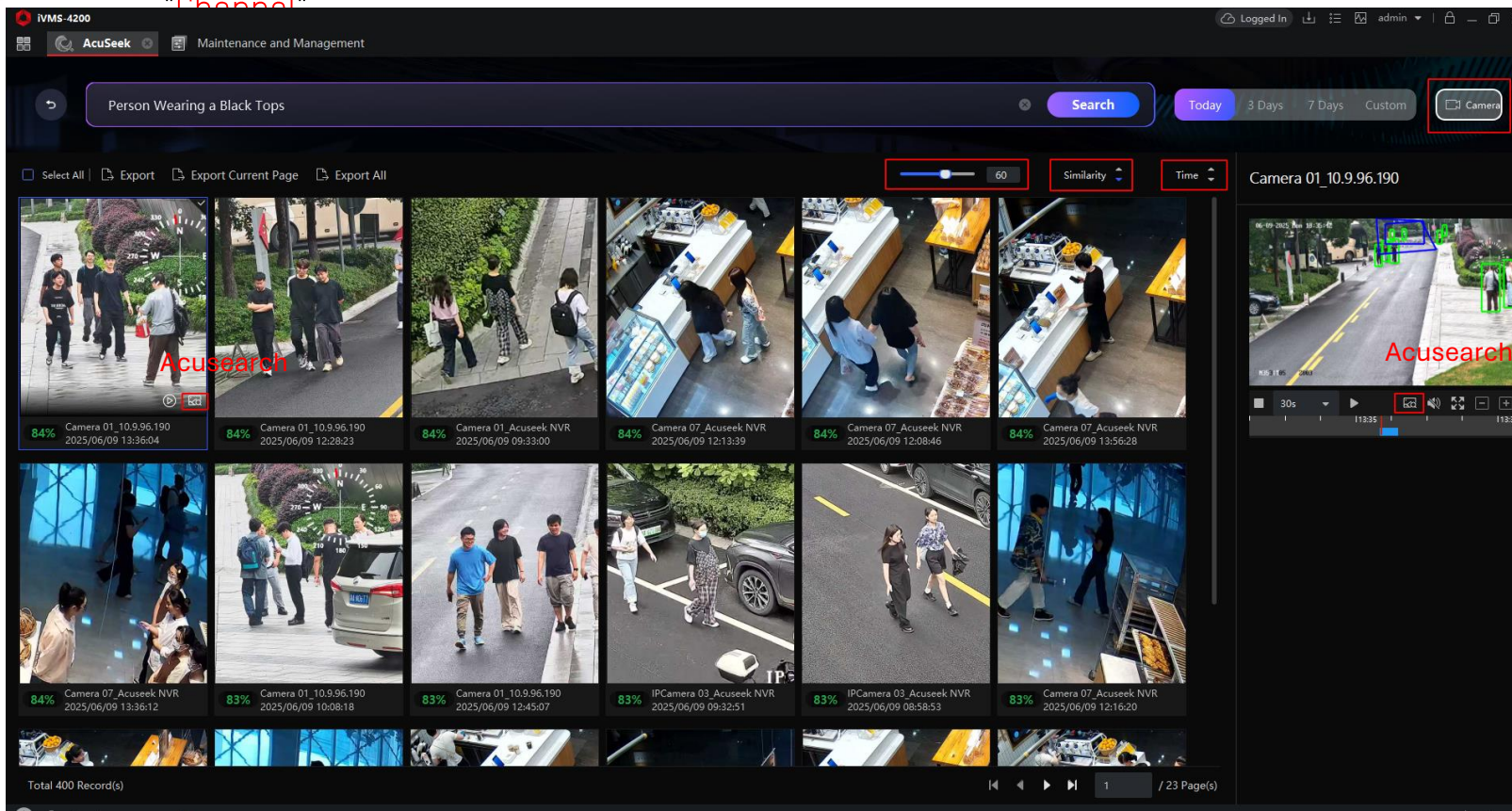
**Note:** Customers can only view all devices that support Acuseek, and cannot configure them

# Acuseek NVR+Acuseek Camera--- IVMS 4200

2. Use Acuseek on the 4200---Take Person as an example

(1) On the result display interface of Acuseek, the search results can be adjusted through parameters such as "Simitanity", "Time", "Date", and

"Channel"



Note:

(1).The 4200 supports cross-device use of Acuseek  
 (2). The number of Acuseek-supported NVRs determines the search results.

1 NVR: Displays up to 200 results.

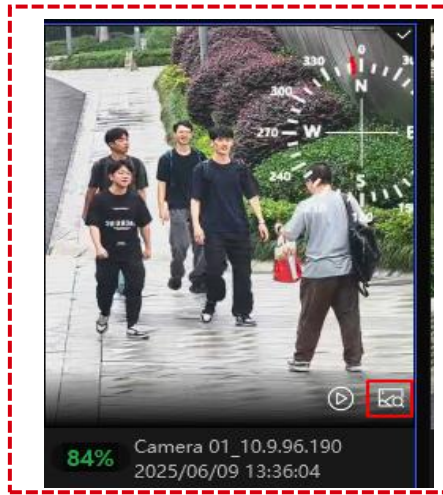
2 NVRs: Displays up to 400 results

...and so on,

# Acuseek NVR+Acuseek Camera---IVMS 4200

4. Use Acuseek on the 4200---Take Person as an example

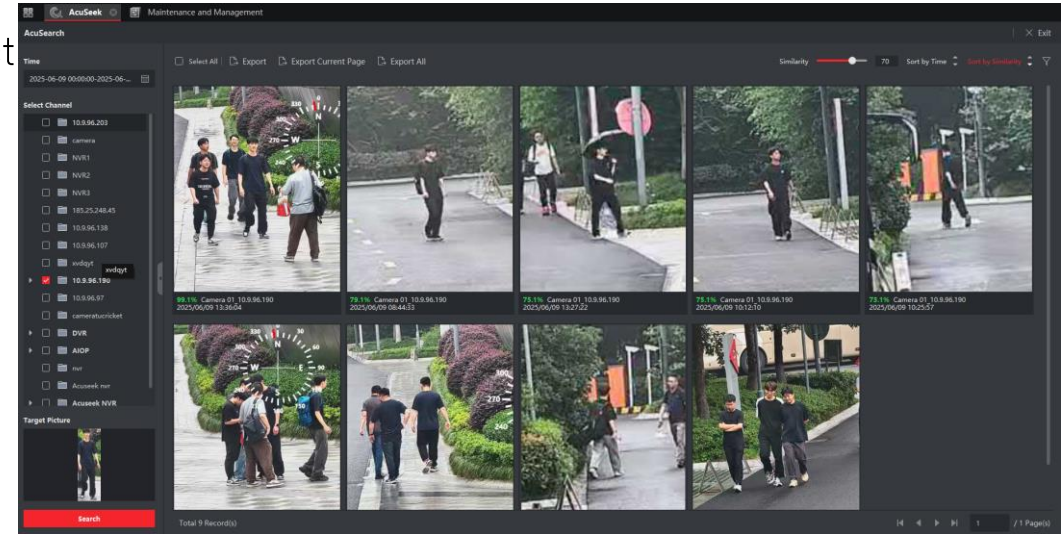
(1) After selecting the video, you can click  " " to use the Acuseek function



Method 1

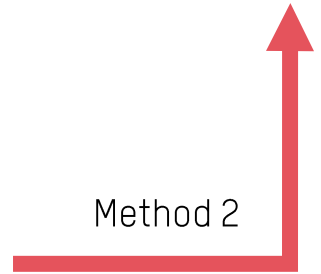


Acuseek is based on the text input by Acuseek



Method 2

Acuseek any target in the whole frame



# FAQ & Troubleshooting

# 3.

## FAQ&Troubleshooting

1. the camera is not in Acusearch-supported mode, can the NVR side switch it??

Yes, it can switch.

2. Does Acuseek support searching for targets by person name?

No, it does not.

3. HCP support Acuseek?

Not currently supported, but it is planned to be added in version 3.0.1..

# 3.

## FAQ & Troubleshooting

### 4. What types of terms are not recommended for using Acuseek??

1. Some things that are not easy to understand, such as being handsome, are not quantitative descriptions and will not return definite results.
2. Proverbs, such as Lucky Dog, are technically incomprehensible and therefore do not give definite results.
3. Fast or complex behaviors, such as running a red light or stealing, require multiple frames to make inferences and comparisons, and it is not recommended to search.
4. Reverse vocabulary, such as people without hats, cannot guarantee the results of reverse search because the training is based on forward samples

|  Examples of <b>recommended</b> search terms   | Examples of <b>unrecommended</b> search terms   |
|---|---|
| <br><b>HUMAN</b> <ul style="list-style-type: none"><li>• Attributes: gender, age group, physical features...</li><li>• Clothing: red top (color), jeans (material)...\</li><li>• Accessories: mask, hat, glasses...</li><li>• Carrying objects/peripheral objects: backpack, trolley case, dog...</li><li>• Status: smoking, holding hands</li></ul> | <ul style="list-style-type: none"><li>• <b>Unspecified description:</b> pretty, dumb, smart, cute children...</li><li>• <b>Idioms and complex idioms:</b> lucky dog, black sheep, bad apple...</li><li>• <b>Instantaneous action:</b> climb the wall, scratching the car...</li></ul>                               |
| <br><b>VECHILE</b> <ul style="list-style-type: none"><li>• Brand: BYD, Tesla, Mercedes-Benz...</li><li>• Type: SUV, truck...</li><li>• Color: black, white...</li></ul>  | <ul style="list-style-type: none"><li>• <b>Complex Behavior:</b> running a red light, driving against traffic, stealing...</li><li>• <b>Negative description:</b> not wearing a top, not wearing a helmet...</li><li>• <b>Spatial relations:</b> tattoo on left arm, car without right rearview mirror...</li></ul> |
| <br><b>MNV</b> <ul style="list-style-type: none"><li>• Type: Bicycles, electric bikes, tricycles, carts...</li></ul>   | <ul style="list-style-type: none"><li>• <b>Concepts:</b> tools, objects, things ...</li><li>• <b>New target:</b> Xiaomi SU7 Ultra (current version supported until 04.2024)</li></ul>   |

# 3. FAQ&Troubleshooting

If during the process of using Acuseek nvr, when both the configuration and the NVR capability are satisfied, and there is no search result or very few search results when using Acuseek and Acusearch, then you can open the following printing.

1.Open ssh

2.debug

4.outputOpen

5. setDbgCtrl 0xff 0xff 0x200 0x1006.

6. setDbgCtrl 0xff 0xff 0x200 0x100000000

7.Repeat issue

Thank you

